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MENTAL ABNORMALITIES.*

By J. T. SEARCY, M. D.

TUSCALOOSA, ALA.

I. Introductory and Explanatory.

MENTAL VARIATIONS.

Human mentalities vary and differ in every particular. Men's minds vary, normally, at different times in their lives between infancy and old age. They differ, at the same age, in different individuals, in different families, and in different races. Men's mental abilities differ, also, in the different departments of thought; some learn better than others; some reason better than others; some execute better than others.

NORMAL MINDS.

A man's mentality may be said to be normal when it conforms to the standard we set for it. Necessarily we have to vary our normal

*This essay on Mental Abnormalities has been prepared by the author as a convenience in teaching the subject. It has served very well as a manual for the physicians and employes of The Alabama Insane Hospitals, and as a text-book in the Training School. It has been commended as a concise and practical method of presenting some of the questions that embarrass the subject of insanity.

standards to suit the mentalities of different persons; according to the age, the family, the race, and the previous habits and mental training of each one. Although the normal standards, we set for different persons, differ, they are normal in that they conform to natural, usual and expected types of mentality.

ABNORMAL MINDS.

Mental abnormalities are variations from the natural, usual, expected and customary standards we set for persons. Any unusual, unexpected and unnatural variation of mentality is abnormal.

MENTAL DISEASES.

If the term disease be taken in its broadest signification, to include all forms of human abnormalities, mental abnormalities may be said to be mental diseases. We often hear them spoken of as diseases, whose treatment is usually referred to medical men.

PSYCHOSIS.

The word Psychosis is coming into scientific and, latterly, into popular use as a term to designate any mental abnormality. It is derived from the Greek word "psuche," mind. from it, we also get the words psychic, psychiatry, psychiatrist, psychology, psychopathy and the like. The words psychotic (a psychotic malady), and psychosed (a psychosed person) would be legitimate and convenient.

GRADES OF PSYCHOSIS.

A Psychosis is a mental malady of any kind. There are all grades of any kind of psychosis. Psychoses are graded as mild or serious according to the way they injuriously affect the welfare of the person himself or the welfare of others. Some kinds of psychoses are usually more serious than others; usually a mania is more serious than a melancholia and a melancholia than a dementia; and at one stage in its progress the same psychosis may be more serious than at another, in the way it injuriously affects the welfare of the person or of some one else.

ESTIMATION OF MENTALITIES.

The mentality of a person is the part of him that relates most to the external world. More than anything else it brings him into re-

lationship with others. For this reason men are always very much interested in the mental abilities of others. To observe and properly estimate the mental abilities and tendencies of others is one of the most constant, necessary and instinctive habits men have. In this particular, every man instinctively estimates and grades the different persons with whom he is associated and in whom he is in any way interested. This habit has become instinctive, because it has been so long and so constantly practised through generations, that it has become an hereditary trait. To "judge others mentally and morally," is an every day practice on the part of all, and it is customary to seek the advantage of the observations and knowledge of others in these matters. Much of common talk and gossip is composed of an interchange of information and opinions on these subjects. For these reasons persons become properly interested in and jealous of the reputations they bear.

PSYCHOSED PERSONS ESTIMATED.

Because mental normalities are so zealously observed and graded, all the more are mental abnormalities quickly noticed and reported. Psychoses are always studied with interest and concern.

DEFINITION OF TERMS.

The term psychosis is applied to all kinds of mental abnormalities and covers all grades of each kind. Because the terms lunacy, mental unsoundness, non-compos-mentis, craziness and insanity have been indiscriminately applied to all kinds and all grades of mental abnormalities, much confusion has arisen. It is best to limit the application of these terms to the graver grades of the psychoses; to have them apply only to those grades that legally disqualify a person. Lunacy and mental-unsoundness are broad terms and are applicable to all psychoses that are of a disqualifying grade. Non-compos-mentis properly is applicable to those kinds and grades that render the person deficient in mentality, which deficient condition so disqualifies him that he is dependent on others for his support. The term insanity is more properly limited to those kinds and grades that render the person a menace to property, to his own safety, or to the welfare of others.

DEPENDENT AND DELINQUENT.

Mentally disqualified persons can be classed as dependent or delinquent characters. Dependent means incapable of self-support, depen-

dent on others; delinquent means offensive, troublesome, or dangerous to others,—delinquent in conduct. A mentally disqualified person sometimes, is both dependent and delinquent; a maniac or idiot can be both. The most prominent symptom, as is the case with other technical names for psychoses, determines the classification; an idiot is usually dependent; a maniac, delinquent.

A COURT ALONE AUTHORIZED TO DISQUALIFY.

A court of the State alone is authorized to declare a person disqualified by a psychosis. There are a number of civil rights, privilege and responsibilities from which a court can disqualify a person because of the serious grade of his psychosis. The law authorizes a court to estimate the grade of the psychosis of a person for the purpose of disqualifying him from some of his civil rights, from some of his legal responsibilities, and, also, for the purpose of giving him the advantage of State care and treatment. For instance, a court can take cognizance of a psychosis and estimate that its grade is sufficiently serious to disqualify him from voting, testifying or marrying; or can disqualify a person, so as to invalidate his will, his contract or his conveyance of property; or can disqualify a person so as to declare him dependent on charitable aid, or upon a guardian to manage his business for him; or can disqualify a person as one so mentally abnormal, that, for his own welfare or the welfare of others, he should be restrained from going at large and have the advantage of care and treatment in an insane hospital; or a court can judge the mental abnormality of a person sufficient to absolve him from the penalty of the law if he have committed a crime.

Because the law only takes cognizance of disqualifying grades of psychoses it is preferable to confine the commonly used legal terms insanity, unsound-mind, non-compos-mentis, lunacy, and the like, to the grades sufficiently serious for legal disqualification. The term psychosis, however, covers all grades.

THE INSANE NOT CRIMINALS.

Because the person is recognized as one disqualified by his mental disability or defectiveness, the procedure of court that considers his case is an inquisition into the grade of his malady. It is not a trial for crime nor should it resemble a trial, although the person may be an objectionable, or a delinquent character. An insane person is now-a-days, never declared a felon or a criminal; nor is he sentenced or condemned. The paper which commits him to a hospital should be

of the character of a certificate of disability which entitles him to the care and treatment of that institution. It does not sentence him to it. The proper management and control of the insane in a hospital, including their judicious employment, contributes more to their recovery than the medicines they get. It is a part of their medical treatment. They are in no sense sentenced to confinement or to hard labor, like criminals.

ASYLUMS.

Originally, insane persons were legally held responsible for their delinquencies, and were placed among the criminals. When in the progress of time, they were legally recognized as disabled and disqualified persons, who should not be condemned like criminals, at once public safety demanded that some other provision should be made for them. The State then provided for them institutions called asylums, in imitation of the ancient "places of refuge," to which accused persons could flee from the officers of the law. Afterwards, as it was shown that these persons have abnormal or diseased brains, their care was turned over to physicians, the asylums were called hospitals, the inmates were called patients, and their attendants, nurses.

STATE CARE.

Because State care for the insane has proved, as a rule, preferable to private, neighborhood, municipal or county care, the States generally have adopted the practice of providing for the mentally disqualified. Now-a-days the principle is quite generally accepted that all the mentally disqualified are the wards of the State; and, where the State does not make provision for them all in its own institutions, it is affirmed that it should, nevertheless, see that they are properly cared for wherever they are.

SEPARATE CARE OF THE CLASSES.

It is well to care for the different classes of the mentally disqualified separately. They are generally classed separately in the different wards or buildings of the same institution. Where State finances allow it, they are sometimes cared for in separate institutions in different parts of the State. There are now separate hospitals for the care of senile demented; for idiots and imbeciles, as well as schools for the feeble-minded; for inebriates and drug-habitués; for epileptics;

for chronic demented; and for the insane proper i. e., the dangerous types. Economy is often conserved by placing all these institutions under the control of a single State board; and it is still further conserved by placing the different hospitals under one management in the same locality.

DELUSIONS.

Delusions are often set down as indications of mental abnormality. A delusion is a wrong opinion, idea or notion that a person has and holds to. The delusion is wrong in the opinion of the intelligent persons who know the facts on which it is founded. It is not wrong in the opinion of the person himself. He holds on to it or promptly returns to it, notwithstanding the efforts of others to convince him of his error. A delusion is an error of judgment; it always indicates defective reasoning abilities. Delusions are frequent symptoms of a psychosis, and help to determine its grade. A delusion does not always legally disqualify a person; it may not be sufficiently serious for that. It, however, always demands attention as an important symptom. The results of defective reasoning promptly bring a person within the attention of others. His conduct is founded mostly upon his reasoning abilities. Reasoning is the central and most important part of mentality. More than anything else it determines the standing of a man. Deficient, faulty or defective reasoning abilities produce delusions. The insane are often described as "without reason," and "full of delusions."

ILLUSIONS AND HALLUCINATIONS.

Illusions and Hallucinations are varieties of delusions, that occur through the senses. In illusions and hallucinations the person is deluded as to what he sees, hears, smells, tastes or feels. The difference between an illusion and a hallucination is, in an illusion there is an external object affecting the sense organ, but the person is deluded as to the character of it; in a hallucination the delusion is altogether imaginary, there is nothing affecting the sense.

II. Classification of Psychoses.

TECHNICAL NAMES.

There are many kinds of Psychoses to which technical names are given. The most prominent trait, symptom or characteristic of a psy-

chotic malady, prevailing at the time, usually determines the name. There are three quite distinct types of abnormality, which gives names to many psychoses; they are mania, melancholia and dementia. A large number of psychoses are designated as varieties of one or the other of these types, and, usually, that one of the three which is the most prominent characteristic at the time gives the name. The psychosis, for instance, may be called a variety of mania, while the person may be, to a less degree, both melancholy and demented but his mania is the most prominent symptom; afterwards, his melancholia or his dementia may become most prominent, and change the name:

THREE GENERAL DIVISIONS.

For convenience it is well to classify the many psychoses under three general heads: First, the Defective Types; second, the Deficient Types; third, the Erratic Types. There is so much variability in human mentality, that it is impossible to give definitions with clean-cut or fixed margins. Yet it is, for convenience, well to define certain states or stages, and to place them in certain classes. There would be no order or proper understanding without it.

THE DEFECTIVE TYPES.

KINDS OF DEFECTIVE TYPES.

The Defective Types of Psychoses may be said to have as their most prominent characteristic more or less mental stress or effort, which is abnormally defective. The person's mind is abnormally earnestly occupied in a certain way. He is popularly called "deranged."

Under the Defective Types may be placed the Manias, the Melancholias, and the Phobias.

MANIA.

A Mania is an exalted or excited mental abnormality. A maniac does not have a sense or self-conviction of his own mental inability. He is abnormally exaggerated, exalted or excited in his ideas and conduct. Manias can be classed as Acute, Transitory, Relapsing, Recurrent, Circular, and Chronic.

ACUTE MANIA.

Acute Mania is a recent mania. It is best not to use the term to mean a severe mania. An acute, or recently begun, mania has not yet shown how it will change or end.

TRANSITORY MANIA.

A Transitory Mania is an Acute Mania that ends quickly. Whenever an excited or exaggerated mental abnormality passes off promptly it is a Transitory Mania. A delirium accompanying a fever is usually a Transitory Mania. The excited or exalted stage of an intoxication by alcohol, or other such agent, is a Transitory Mania.

RELAPSING MANIA.

A Relapsing Mania is one that subsides, or grows better, but does not entirely disappear before it becomes worse again.

RECURRENT MANIA.

A Recurrent Mania is one that ends in recovery, but returns again after a time.

CIRCULAR INSANITY.

There is a form of varying or changeable psychosis called "Circular-insanity," in which the mental condition makes a circle through two more different types. The leading characteristic at one time, for instance, may be mania, then it may change to melancholia, then to dementia, after which it may become normal; after a time, the insane condition recurs again and the same circle repeats itself.

CIRCULAR MANIA.

Circular Mania is an excited or exaggerated stage that occurs in the course of a "Circular-insanity."

CHRONIC MANIA.

Chronic Mania is a mania that hangs on a long time. Most manias end in recovery or change into something else; the psychotic state seldom continues as mania through a long life-time. When a mania

continues a long time it is called chronic. The injury done by the excited stress and strain of mania generally brings on a condition of secondary dementia; when this occurs, the dementia, being the most prominent characteristic, gives the condition that name.

Because Maniacs are often excited, violent or dangerous persons, who, because of their objectionable characteristics, were the first to be called the insane, and, necessarily, were the first to be provided for by the State, the hospitals for the insane are frequently popularly, supposed to be filled with maniacs; which is by no means the case. Most maniacs and other insane eventually become demented; which fills these institutions with that class principally.

MELANCHOLIA.

Melancholia is a form of Defective Psychosis in which the prominent characteristic is abnormal mental depression or misery. Melancholia is permeated with and largely rests upon a sense or self-conviction of mental inability. A melancholiac, generally, is depressed or mentally miserable because he has an abnormal sense of his inability to be or to do what he desires. He yields to his abnormal sense of inability and is depressed, miserable and melancholy.

CLASSES OF MELANCHOLIA.

Melancholia can be classed as Acute, Transitory, Relapsing, Recurrent, Circular or Chronic. These terms have the same meanings as when given in describing similar varieties of mania. Acute Melancholia is a recent melancholia. Transitory Melancholia soon recovers. Relapsing Melancholia gets better, then worse again. Recurrent Melancholia recurs after an interval. Circular Melancholia makes one stage in a round of "circular insanity." Chronic Melancholia lasts a long time.

Melancholia, like mania, often terminates in secondary dementia.

PHOBIA.

Phobia means an abnormal fear or dread of something. Apprehensions are natural or normal states of mind; they sometimes, however, reach an extremely unreasonable grade when they become abnormal. Particularly, does an apprehension, fear or dread become a psychosis when it is founded on a delusion. Some phobias are natural apprehensions, carried to an extreme; others are entirely unfounded in that they are based on delusions. A person, for instance, can carry

a natural fear of fire or lightning to such an extreme that it becomes an abnormal mental condition; another can have abnormal fear about spirits haunting him or disease threatening him, either of which is a delusion. The list of technical names given to different Phobias is a long one. There are about as many specified as there are things that have been the objects of abnormal fears. A Phobia sometimes so injuriously affects the welfare of the person or the welfare of others as to bring his case within the cognizance and jurisdiction of a court. Hypochondria is a very frequent Phobia; it is an abnormal fear of some disease.

THE DEFICIENT TYPES.

DEFINITION.

Deficient Types of Psychoses are those in which there is an all-round loss or lack of mentality. In them there is a general deficiency of mental ability in all the departments of thought. A mentally deficient person does less thinking of all kinds. He is generally less capable than a normal person. His most prominent characteristic, which gives him his classification, is either a general loss of mentality or an original want of it. The Deficient Types of Psychoses can be divided into those of Dementia and of Amentia.

DEMENTIA.

Dementia is a Deficient Type of Psychosis in which there has occurred, at some time in the person's life, a general loss of mentality. The whole mind, in all of its departments, has become impaired. There is less ability to think and, consequently, less thinking. In its extreme grades, the person is a very pitiable object; he has barely enough mind left to exist with the help and attention of others. Dementia is generally divided into Primary and Secondary.

PRIMARY DEMENTIA.

In Primary Dementia no other form of Psychosis has preceded it. It has been dementia from its beginning; is not a sequel of anything else. Primary Dementia can be Acute, Transitory, Relapsing, Recurrent and Chronic.

ACUTE.

Acute Primary Dementia is a recent condition.

TRANSITORY.

Transitory Primary Dementia is a dulled, dazed, stupid or confused mental condition, which soon changes to normal. It does not last long.

RELAPSING.

Relapsing Primary Dementia gets better and becomes worse again. It may repeat the relapses a number of times.

RECURRENT.

Recurrent Primary Dementia returns again after a period of normal mentality. The recurrences may happen a number of times.

CHRONIC.

Chronic Primary Dementia remains for a long time. It is not usual for a Primary Dementia to become chronic in a young person. A chronic primary dementia in a young person is called Dementia Precox, or Precocious Dementia.

SENILE.

The natural effect of old age is to produce Senile Dementia. The natural age for this condition to occur varies greatly in different persons. Senescence sets in much earlier in some persons than in others. A Dotard is a Senile Primary Dement.

SECONDARY DEMENTIA.

Secondary Dementia is always a sequel to some other form of Psychosis, most often Mania or Melancholia. It often forms the last stage of Circular-Insanity. It can be secondary to any serious brain disease or injury. Dementia is called Terminal Dementia, when it becomes the incurable stage which ends with the man's life.

AMENTIA.

The second of the Deficient Types of Psychoses is Amentia. By Amentia is meant an all-round want of normal mentality, which has existed all of the person's life, or since he has been old enough to have had his mentality graded. It is a want of normal efficiency in all the departments of thought. Aments are sometimes called duldards. Amentia may be divided into Idiocy, Imbecility and Simple-

Mindedness. These terms simply designate different grades of Amentia, which shade off into each other.

IDIOT.

An Idiot is an Ament who cannot be taught to be useful in any way, to himself or to others. He is utterly helpless and dependent.

IMBECILE.

An Imbecile is an Ament who can be taught to do useful things under the immediate care and direction of others.

FEEBLE-MINDED.

A Simple-Minded or Feeble-Minded person can be trained and educated to be quite useful, and sometimes can work independently of outside help, so the work is not too complicated. Schools for the Feeble-Minded often accomplish very encouraging results. Careful training can improve all Aments in early life.

THE ERRATIC TYPES.

DEFINITION.

The third class of Psychoses is the Erratic Types—those that differ from the normal in singular and peculiar ways. The Erratic Types may be said to be principally the results of an hereditary bias or tendency to erratic ways, which the person holds as an inherent trait. Prominent among the Erratic Types of Psychoses may be mentioned Neurasthenia, Hysteria, Paranoia, Moral Imbecility and Immoral Perversity, Excessive Credulity, the Drink or Drug Habit, etc.

NEURASTHENIA.

Neurasthenia literally means nerve-weakness. The most prominent symptom of Neurasthenia is over-sensitiveness. It is popularly called nervousness. A frequent symptom of it is malaise or general bad feeling. The neurasthenic is easily discomforted. He is easily fatigued. The natural functions of the body, such as thinking or muscle work, occasion him discomfort. He is loth to put forth effort of any kind. Is often irritable and intolerant.

In its graver forms Neurasthenia sometimes reaches a grade that is

sufficient to legally disqualify a person. The neurasthenic may become an object of sympathy, and legal interference may be required for his own welfare, or for the welfare of others.

HYSTERIA.

Hysteria may be called an Erratic Psychosis of an emotional type. While in Neurasthenia the sensations are the morbid feature, in hysteria it is the emotions. The hysterical person laughs, cries or is irritable, in an abnormal manner. In hysteria the abnormal emotion of the person almost always has in it the purpose of attracting the attention or the sympathy of others. Hysteria generally subsides on the withdrawal of the attention of others. The hysterical psychosis occurs in both men and women. Owing to the difference in the mental characteristics of the two sexes, in men the emotional exhibitions are more generally of an irritable or peevish type, meant more to give offence than to attract sympathetic attention. Like Neurasthenia, Hysteria is a common malady, of all grades. In the extreme, Hysteria can render a person so much an object of sympathy or of objection, as to require that a court disqualify him or her.

PARANOIA.

Paranoia, in common language, may be described as unreasonable crankiness. Abnormal eccentricity, in different grades, is not an infrequent psychosis. It can be found in all directions in society. The prominent symptom in Neurasthenia is abnormal sensitiveness; in Hysteria is abnormal emotion; in Paranoia is abnormally eccentric reasoning. The term unreasonable suits the paranoiac in two ways; his peculiar and erratic ideas and conduct are unreasonable in the way they differ from the common-sense views of others; and the paranoiac is generally unreasonable in the way he is persistent and conceited in holding on to his peculiar notions, or even urging their adoption. A paranoiac is generally said to have "systematized delusions" in that he has a systematic way of supporting by argument his peculiar delusions. Faulty reasoning abilities give rise to delusions; delusions are very frequent symptoms in the paranoiac. Because their unreasonableness brings paranoiacs into frequent conflict with others, they are much given to delusions of suspicion of others and of persecution on the part of others. They are often contentious and litigious. They sometimes pose as reformers.

Paranoia is incurable; it is a hereditary bias, Paranoiacs some-

times appear as descendants of strong lines of intelligent ancestry, who while they have become defective in their descent, still retain many of the strong and persevering mental habits of their parentage. The tendency of Paranoia is to grow worse as the paranoiac grows older. In its extreme grades, it renders some persons most objectionable members of society. Those paranoiacs, sufficiently erratic to be disqualified by a court and sent to a hospital, are always unpleasant and troublesome patients. They never recognize their own unreasonableness, and never admit the correctness of the court that disqualified them, or of the hospital that restrains them.

MORAL IMBECILITY.

Moral Imbecility can very properly be pronounced a Psychosis and placed among the Erratic Types. It means an abnormal inability in the mentality of the person "to hold to the right or to avoid doing wrong." Moral rules, regulations and laws constitute a very prominent and important element in the environment of every person, prescribed for him by public opinion or enforced by State-law. A citizen is not legally allowed the right of arguing himself out of civil moral obligations. There are some persons who comprehend and admit moral obligations and do not deny the rightfulness of them, but are inherently weak in observing them under opportunity or temptation. The relapsing offenders, called "recidivists," who repeatedly come into the police courts, are examples of this class. The reluctance of the courts to admit moral weakness, separate from intellectual weakness, does not undo the fact that there are a few persons who are "unable to hold to the right." Inherent moral weakness or moral imbecility is sometimes admitted now-a-days in law, as a mental psychosis.

IMMORAL PERVERSITY.

There is another type of this same psychosis, namely Immoral Perversity. The person is abnormally set or perverse in his immoral tendencies. He is intractable by persuasion or training and incorrigible by punishment. These exceptional characters appear here and there in society, sometimes, very unexpectedly, in the best homes and surroundings. Immoral perverts, with considerable intelligence, adroitness and cunning, with little apparent intellectual defectiveness, show great immoral defectiveness. They commit crimes in society that cannot be explained under ordinary motives. They murder, rape, fight, burn; they lie, steal, forge and offend, with no apparent motive other than the very pleasure of doing wrong—they delight in it. They are the fiends we sometimes find. There is no way of explaining such characters, except that they are inherently, immorally perverted; psychosed in that way.

INDETERMINATE SENTENCE.

The advantage of "the Indeterminate Sentence," by which the length of time that a man shall be removed from society in a penal institution depends upon the grade of his moral abilities and habits, is shown more and more to be good law. He is kept in the prison or reformatory indefinitely, for public welfare, no matter what his crime or offense, if he prove a moral imbecile or an immoral pervert. If it is found that he is incapable of making of himself a good citizen or of being made into one, he is permanently removed from society, like other psychosed persons of objectionable and incurable types in insane hospitals. The question in dealing with such characters is, often, in which direction they shall be sent—to an insane hospital or to the penitentiary. Owing to their liability to escape, their influence over other patients, etc., such persons do not suit well in the wards of a hospital.

CREDULITY.

Excessive Credulity may be mentioned as another type of the Erratic Psychoses. Credulity, faith or confidence is a proper and a natural trait. It can, however, in extreme grades, be declared a psychosis. It is another form of mental weakness which acts sometimes to the disadvantage of the person himself or to the injury of others, to a degree that requires interference. Such persons are often the dupes of fraudulent impostors and sometimes even of reforming paranoiacs. Excessive credulity constitutes the foundation of the susceptibility of some persons to hypnotic suggestion. The stress of a hypnotic surrender, when repeated, results in an injury to the mentality of the person, in other ways.

DRINK OR DRUG HABIT.

The Drink or Drug Habit can quite properly be placed under the types of Erratic Psychoses. The tendency to such habits is usually an inherited trait, and the use of the agent increases the tendency until it makes of it a most formidable psychosis. The alcohol or the anodyne drug has a chemical effect upon the high-brain, which tends to an impairment of all mentality. As long as the alcohol is present, in a case of alcohol intoxication, the man's mentality is like a Transitory Mania, and its continued use produces Mania-a-Potu.

There are other psychotic maladies that ought to be mentioned under the Erratic Types, but these are the principal ones and are sufficient to show what is meant by the class.

PSYCHOSES.

DEFECTIVE TYPES.			DEFICIENT TYPES.		ERRATIC TYPES.
MANIAS.	MELANCHOLIAS.	PHOBIAS.	DEMENTIAS.	AMENTIAS.	
Acute, Transitory, Relapsing, Recurrent, Circular, Chronic.	Acute, Transitory, Relapsing, Recurrent, Circular, Chronic.	Many kinds,	Primary. Acute, Transitory, Relapsing, Recurrent, Chronic,—Precocious, Senile.	Secondary. Acute, Recurrent, Circular, Chronic, Terminal.	Idioey, Imbecility, Feeble-mindedness.
					Neurasthenia, Hysteria, Paranoia, Moral Imbecility and Immoral Personality, Excessive Credulity, Drug Habit, etc.

III. Causes of Psychoses.

HEREDITY.

Heredity may be defined as the living continuance or transition of habits along the line of descent. Deteriorated habits tend to the elimination of the person and of his posterity; improved habits tend to their survival. Hereditary mental deterioration, by which is meant less mental capability in one generation than there was in the preceding, is a very prevalent condition in human society. Mentality is inherently variable. It declines readily and improves slowly—only after effort. Mentality may recover from a temporary impairment, but it does not rise above a previous ancestral level without continued effort.

Excellent mental abilities in the person himself and in his ancestry have been attained only by mental exertion or effort; and a person's inherited level is improved, maintained or lowered by the character of his own mental efforts and habits. There is no ready road to improvement; on the other hand, the road to deterioration is down-grade and easy. Mental excellence is, as a rule, the result of mental effort continued through several generations. It can be lowered readily in a single life-time. The largest part of a man's mentality, he inherits. Mental excellence is largely a family, or a race trait; and mental excellence is an accomplishment, which has to be maintained by the same amount and kind of mental exercise and effort as have been used in its attainment.

DETERIORATION.

Continued idleness deteriorates. Continued idleness is the cause of physiologic deterioration. There can be mental deterioration, a lessening of ability, by a general impairment of health from pathologic causes, which will be described directly. Mental ability-to-think, however, is lowered in quality, not always nor in the majority of instances, by some unnatural, pathologic cause, like disease, but most often by a cessation of mental exercise and effort. That is the all-prevailing, the most common cause.

PSYCHOSES HEREDITARY.

Deterioration being an all-round, general, physiologic lowering of capacities, does not of itself constitute an abnormality—a psychosis. It can, however, be an indirect cause of psychosis. Physiologic

deterioration, by its weakening processes, increases materially the liability of the person to pathologic accidents such as diseases, injuries and defectiveness. Mental capability insures a brain capacity to avoid, resist and recover from brain diseases, injuries and defective tendencies. Psychoses may be said to be side-issues or by-products of deterioration. Accidents of this kind happen because of deteriorated capacity, in the large majority of instances. It is true, brain injuries and diseases, with their consequent defects of mentality, do happen sometimes to persons of improving capacity, or of the already attained highest capacity; they are sometimes unavoidable. Psychoses happen, however, most often to those persons, or those lines-of-descent, that are already mentally weakened, deteriorated or impaired; and the hereditary tendency to them continues in those lines-of-descent. In this sense, psychoses are hereditary.

STIGMATA.

Degeneracy is a term used to designate any organic defectiveness or deficiency that has become established as a hereditary trait. "Stigmata of Degeneracy," in the shape of malformations of parts of the body, particularly when there seems to be an established hereditary habit of that sort, are frequently drawn attention to as important indexes of mental abnormalities or liability to them. External stigmata indicate that there is, in the hereditary, shape-taking habits, (the morphology) of the person, a tendency to be easily deflected from the normal. The brain may or may not be involved in an aberrancy that affects other organs. Only a general tendency to abnormalities of structure is shown by the stigmata, which may or may not affect the brain, or mentality. In the same way, there may be a hereditary tendency to brain abnormality, while other parts are very normal.

CELLS.

The whole man is a living entirety. There is no part of him that is not living. Every organ is an aggregate of separately-acting, living cells, each one a separate entity; at the same time all are aggregated and associated together in doing the special functional work of that organ or structure. The cellular aggregates compose the structures and organs, which in their aggregate compose the whole-man. The man cannot be properly understood unless he is looked upon as a community of separately acting, intimately associated organs or structures, themselves composed of innumerable numbers of separately act-

ing living cells. This general community of actions and interests, harmonized and equilibrated into a communistic whole by the nerve-lines of the body, is affected or disturbed by injury or impairment of any part. The harm is done not only by the loss of function of the injured organ but there is always more or less sympathetic disturbance of other parts. The mentality of a man can in this way be disturbed. A sudden mental suspension, or shock, occasioned by the sudden injury of a distant part is an example of this. Slower disturbances are also shown. Vice versa, for the same reason, distant organs are affected by mental conditions.

TOXINS.

Toxins are a class of agents that have injurious effects upon brain action, and lower, disturb, injure and, in time, often seriously impair mentality. Next to deterioration, generally in addition to deterioration, they are probably the most frequent cause of psychoses.

TWO KINDS.

There are two kinds of Toxins, those that enter the circulation from within the body and those that enter from without.

TOXINS FROM WITHIN.

Toxins from within cause what is called Auto-intoxication. There are two kinds of Toxins from within; those that are the waste products of natural changes in the structures, which, not being properly or sufficiently eliminated by the emunctory organs, accumulate in sufficient quantity in the blood to be toxic to the brain; and those that are the products of disease going on in some organ. The general effect of idleness, or not enough exercise, is to produce general deterioration of system, which not only tends to increase auto-intoxication from any source, but also renders the brain more sensitive to its injurious effects. Deterioration increases auto-intoxication and auto-intoxication hastens deterioration. They often accompany each other.

THE ALIMENTARY CANAL.

Probably torpid, impaired or diseased function of the digestive tube, in some part or in its whole length between the mouth and the rectum, is the most frequent source of Auto-intoxication. The importance of the alimentary canal in the treatment of mental diseases is illus-

trated by the fact that, generally, the first medication done is, as far as possible, to improve its sanitary condition by cathartics and intestinal anti-septics. If Auto-intoxication from the digestive tube can be stopped, in most cases of psychosis, an important step has been gained.

TOXINS FROM WITHOUT.

Toxins introduced from without form a very frequent source of mental abnormality. Many of these are medicines, properly administered. There is a peculiar class, frequently administered, called anodynes and anaesthetics. They have brain effect, so that by their peculiar chemical affinity for its delicate structures they render the man less sensitive, or wholly unconscious if large doses are given. In small doses, they have a pleasant effect. For this reason a few of the least toxic have come into very general use as luxuries. Notably among them are nicotine and alcohol, opiates and cocaine, which are very extensively taken for their comforting effects. Their continued use impairs mentality. Sometimes induces psychoses. The tendency to a drink or drug habit is often an inherited trait, which trait is rapidly increased by the use of the alcohol or drug. The neurasthenics probably furnish the largest number of these habitues. The inherited over-sensitiveness and general bad-feeling of neurasthenics lead readily to the use of such agents to allay discomfort; and the effect of a drink or drug habit upon a congenital neurasthenic is to increase his neurasthenia. If the user of such agents is not a congenital neurasthenic, their repeated use produces in him an artificial or acquired neurasthenia. Both congenital and acquired neurasthenia are increased as long as the habit is continued. A tendency to any other psychosis, besides neurasthenia, is also increased by the use of such toxins. His very ability to hold to a purpose or resolution to quit his habit is impaired by the toxin, so the habitue hastens himself on towards mental disqualification. The injurious effects of such toxins upon the mentality of persons is abundantly illustrated in society; and the neurasthenic or otherwise psychosed children of such habitues are frequently found as natural hereditary results of their habits.

BRAIN INJURIES AND DISEASES.

It is easy to see how injuries and diseases, which disintegrate brain structure, according to their character, their location and their ex-

tent, directly impair mentality; of such there are very many. It can be assumed that all aberrant mental action is the result of impaired brain structure. It has already been stated that brains, deteriorated by idleness and brains weakened by general ill-health or toxins are more liable to injuries and diseases. Tubercular bacilli, syphilitic germs, parietic cellular degeneracy, meningeal or other inflammations, hemorrhages from diseased arteries, occlusion of arteries, impair mentality; and so do direct acts of violence (traumatisms) of the brain. So central and so all important are brain functions in the economy of the system, that active or extensive disease or injury of the organ promptly results in the death of the whole-man. Extensive, active diseases of the cerebrum are not often found for that reason. The extreme strain of epileptic seizures in time produces or increases other abnormalities of the brain; and so do chorea and paralysis agitans gradually impair mentality.

Human mentality is such an exceedingly complex affair, and varies so much, that it is impossible to predict what result, in conduct and deportment, will follow the same general cerebral impairment, in different persons. Local lesions of certain tracts, it is true, will produce certain kinds of paralyses, but the same general agent or disease, that affects the whole organ, will be followed by different effects in different persons. Intoxication, for instance, by alcohol, within certain bounds, will produce different effects in different persons. When the inhibitory faculty, most delicately balanced, is temporarily impaired by such an agent, generally, inherent mental defects or tendencies are rendered apparent. Disposition, temperament, traits, habits of thought, or tendencies to abnormality, all give direction to the aberrant thoughts and conduct of a person whose mentality is generally impaired in any way. The same toxin in one person will give a result of mania; in another, of melancholy; in another, of confusion and dullness.

These facts, but briefly mentioned, complicate the investigation of the **causes of Psychoses.**

It is not meant in this treatise to describe the pathology of structural diseases of the brain. A description and classification of the traits, symptoms and characteristics of abnormal mentality are all that is attempted.

ACUTE LOBAR PNEUMONIA—SOME REMARKS ON ITS
PREVALENCE, DIAGNOSIS AND TREATMENT.*

By CABOT LULL, M. D.,

BIRMINGHAM, ALA.

The consensus of opinion of medical men based on general observation, and verified by the most reliable statistics obtainable, is that pneumonia is increasing in prevalence.

Among the more prominent writers in this country holding this view are Osler, Musser, Reynolds, Folsom, Norris and Pleasants. The latter named deals with this subject in a carefully written article in the Maryland Medical Journal, May, 1904. He, quoting the statistics given by the last United States census, sounds a note of alarm when he asserts that: "Although still behind pulmonary tuberculosis as a cause of death, if anything like the same increase is maintained in the death rate from pneumonia, and if the consumption rate continues to fall, or even remains constant, the next census will show pneumonia well established as the principal cause of death in the United States."

The number of deaths from consumption reported by the census of 1900 is 109,750, while pneumonia claimed 105,971. It is shown that 9.06 per cent. of all deaths in 1890 were due to pneumonia and 10.61 per cent. due to this disease in 1900.

According to the mortality statistics of the city of Chicago for the last fifty years there has been a decrease of 40 per cent. in deaths due to consumption, while deaths from pneumonia show an increase, at least since the last decade of the 19th century, of 53 per cent. These figures seem almost incredible. The increase in mortality with reference to geographical distribution has been compared and appears to be general.

It must be borne in mind that these are statistics of pneumonia mortality and present a very unsatisfactory basis for calculation as to prevalence. It may be fair to assume that if there is shown to be a marked increase in mortality there must be an increase *pari passu* in incidence, unless we can concur in the pessimistic view of a recent writer who says: "Statistics and observation in the cities and hospitals force me to acknowledge that pneumonia is not as successfully treated now as it was twenty or thirty years ago."

*Read before the Jefferson County Medical Society, August 22, 1904.

Some very able men refuse to accept such evidence as has been adduced by those who contend that the increase in either prevalence or mortality of pneumonia is sufficient to cause alarm.

Such factors as the density of population, general prolongation of life to the age where the disease is most fatal, the negro element, the increased virulence of the organism causing the disease, epidemics of influenza and lastly more accurate diagnosis and mortality statistics, should undoubtedly be reckoned upon.

Commenting editorially on this phase of the subject, the Journal of the American Medical Association says: "More accurate diagnosis of pneumonia, especially broncho-pneumonia in children, who were formerly reported to have died of measles, whooping cough or other acute diseases, as well as pneumonia in adults formerly diagnosed as a complication of diseases or heart or kidney trouble goes far toward explaining this apparent increase in pneumonia."

Whether we subscribe to the one view or the other we must admit that pneumonia is our most dreaded disease, and one in which we realize most fully the impotency of drugs.

THE DIAGNOSIS.

It would be difficult to convince some practitioners that there is any difficulty about the diagnosis of lobar pneumonia. The history of a chill, following exposure, together with a high temperature, a full bounding pulse, rapid respiration, pain in the chest, cough, anxious, flushed face and rusty sputum furnishes a picture which is unmistakable. Then, if we add to this the characteristic physical signs we "make assurance doubly sure."

But it is not always our good fortune to find patients presenting so complete a symptom complex.

In some cases no history is obtainable and when seen early many of the characteristic symptoms are undeveloped or even fail to appear during the entire course of the disease.

Sole reliance must often be placed on the objective picture, in other words, the physical signs. The necessity of approaching the subject of a physical examination without preconceived ideas is here most imperative, as very slight variations serve to differentiate pneumonia which is atypical from numerous other diseases.

The physical signs of pneumonia are so familiar to careful diagnosticians as scarcely to require mention. We note on:

Inspection.—Frequent respiration, sometimes dyspnoea, lessened expansion of the affected side.

Palpation.—Lack of expansion of affected side. Increased voice fremitus.

Percussion.—A tympanitic note in engorgement and above consolidated areas. Later the dullness of consolidation. Still later the tympanitic note in resolution.

Auscultation.—Early quiet, suppressed breathing with a fine crepitant rale. Distinct blowing, bronchial breathing. Voice sounds greatly exaggerated, amounting to aegophony. Heart sounds loud and clear, except when the right heart becomes engorged, then pulmonary second sound becomes less distinct.

No confusion of pneumonia with such diseases as broncho-pneumonia, bronchitis, pleurisy with effusion, hypostatic congestion ought to be made after a painstaking examination. But when one is confronted with symptoms none of which point to trouble in the lungs but rather to some abdominal organ the diagnosis is not so easy.

As an illustration the writer was called to see a robust young man who was suffering intensely with a pain in the abdomen accompanied by slight nausea. He gave a history of having had a chill three hours before. The pain was general over the abdomen which was tender to the touch. The temperature 103, pulse 120, respiration 18. An examination of the chest was negative. No diagnosis was ventured, but appendicitis was the disease suspected. These symptoms subsided in a few hours, and none of a more definite character were apparent till the second day following, when chest signs developed with cough and rusty sputum.

A study of the literature shows that such cases are not rare especially in children, and numerous cases in adults are also reported.

In recent articles by Griffith, Herrick, and others, abdominal pain in pneumonia and pleurisy suggesting appendicitis and other intra-abdominal inflammatory conditions, is discussed and cases are cited. In adults the following cases have been found reported by: Fenwick, 4; Hampeln, 5; Satullo, 3; Barnard, 4; Herrick, 4; Richardson, 1; Scott, 1. In a large proportion of these cases appendicitis was suspected and a few actually went to operation before the pneumonic or pleuritic condition was made out.

In regard to the most frequent site of pain in pneumonia, Grissolle's observation is interesting. In 173 cases, the pain was located in the region of the nipple 89 times; at the base of the lung and the upper extremity of the 6th and 7th ribs 39 times, the side from 10 to 12 cm

below mamillary line 13; anteriorly and laterally, 10; inside of nipple near border of sternum, 6 times; posteriorly, 5 times; and hypochondrium, 4 times; between last rib and iliac crest, once; lumbar region, once.

A study of the cases above referred to emphasizes the advisability of careful physical examination of all organs, as otherwise one may be misled by the apparent localization of pain in organs other than the one affected by the disease.

Examination of the blood of all suspected pneumonia cases should never be neglected, as the blood findings often prove of great value both in differential diagnosis and in prognosis.

There is almost invariably a leucocytosis in pneumonia and some observers hold that a relation exists between the temperature range and the leucocytes. The continuous absence of a leucocytosis or a sudden drop from a hyperleucocytosis to a very small number, when unassociated with the crisis is taken as evidence that the system is no longer able to resist the poison and the fight has been given up.

Recent work in bacteriologic examination of the blood, by many workers abroad and a few in this country, among them Rosenau and Kinsey, has demonstrated the presence of pneumococci in many pneumonia cases. Most of these investigators seem to agree that, "the mere finding of the pneumococcus in the blood has a diagnostic but not a prognostic bearing, while the finding of this organism in large number is of grave prognostic import.

The Prognosis in pneumonia is most uncertain, depending so little as it does on treatment, or even well understood factors. It is resolved down to a balance of power proposition, the virulence of the organism on the one side and the vital resistance on the other. In general it may be said that in patients over 15 and under 50 the outcome is often determined by the presence of some constitutional dyscrasia. Heart lesions generally mean doom, kidney disease reduces the chances very greatly, alcoholism is grave and pregnancy very serious.

The mortality statistics of different hospitals, different years, and above all of different observers, are extremely variable. Statistics from private practice are often less reliable than hospital records but in general show a lower mortality. Wells has collected statistics showing in 465,020 cases 93,110 deaths; more than 20 per cent.

TREATMENT.

As soon as the diagnosis is made and the friends of the patient and often the patient himself learn the nature of the disease, the period of anxiety for all begins. Everyone is seized with an ardent desire to do something to combat the disease and most often some form of local application is suggested. The poultice, which possesses a magic charm, may be composed of any known substance, capable of being brought to a proper consistency to admit of its being applied. We naturally, then, consider first of all local treatment. Local treatment of diseases affecting internal organs had its origin in remote antiquity when ill humors were supposed to be the principal causes of disease.

The history of the evolution of the modern poultice, which in one form or another is now the sheet anchor of many practitioners, furnishes a chapter in empirical therapeutics which is at the same time instructive and pathetic.

Substances applied to the external surface of the body can affect it in the following ways: (1) serve as a protective, (2) become absorbed and act systemically, (3) act reflexly, since impulses are transmitted through the nerves or changes are induced by them in the circulation and nutrition. Thus irritation of the skin may alter the rate of the pulse by impressions being transmitted by the cutaneous nerves and reflected along the inhibitory nerves of the heart.

1. Applying these general principles to the local treatment of pneumonia, we must admit that as an additional safeguard to the body against undue chilling by reason of draughts of air or rapid evaporation of perspiration from any cause, some form of protective material is advisable.

2. Systemic effects of drugs are more readily obtained by other methods of administration than by application to the unbroken skin.

Furthermore it is not presumed that many of the topical applications thus applied are intended to act generally, nor in fact is it probable that absorption, in this manner, takes place to any considerable extent.

But, "it is supposed and claimed," says one writer, "that the main action of local applications is directly on the lung." Manifestly, then, such direct action, if it exists, must depend on changes effected in the temperature of the lung by heat or cold applied to the chest wall, since a glance at the anatomical relations as has been suggested, shows us that, "transmission of blood from the lungs to the muscles and integument of the chest wall or vice versa, through the medium of the pleura, must be slight indeed."

Opposed to the theory of temperature changes brought about directly in the lung by application of heat or cold to the chest are the results of experiments of Thompson, who found that specially constructed thermometers inserted six or eight inches into the pleural cavity through sinuses remaining from old empyemata varied only about one-eighth of a degree when extreme degrees of heat or cold were applied to the thorax.

The same tests made on cadavers showed a considerable variation in the thermometer readings. These results, he says, "justify the conclusion that so long as superficial cutaneous circulation is maintained, the constantly moving blood conveys away either the heat or cold of any external application." So that the effects would be general.

3. It is probable that some agents especially cold, as ice, act to some extent reflexly by stimulating the heart and vessels and the respiratory centre. But would not the sum total of such stimulation be small and difficult of regulation, hence of doubtful utility as compared with results brought about by accurate dosage of drugs capable of ready administration?

The most rational theory yet advanced to explain this action of local applications and the only one which would seem to justify their employment, is that of Head. This worker has mapped out certain sensitive areas on the skin which bear a distinct relation to the internal organ affected, probably by reason of the fact that both tissues are supplied with nerve fibres from the same segment of the cord.

He has further demonstrated that counter irritation applied over these sensitive skin areas proved more beneficial than when applied elsewhere. While this theory affords a very satisfactory explanation of the relief of pain by counter irritation, it could hardly be assumed that the nerves concerned with the nutritional and functional processes of an internal organ, even should they come from the same segment in the cord or be associated by rami from the sympathetic system, could be influenced reflexly to the extent of affecting an inflammatory process once established.

GENERAL TREATMENT.

It is axiomatic in medicine that, where there is no drug approaching to a specific effect in a disease, the number of agents recommended and employed is without limit. So vast an array of drugs has been presented and some of them by high authorities that the text-book writers grow weary in their enumeration.

It is impossible to even allude to all these remedies, nor would it be profitable to discuss at any length the much talked of "specifics," most of which are unsupported by rationale or reliable statistics.

Of these Digitalis, Calomel, the Iodides, the Salicylates, Quinine and Creasote each in its turn has been claimed to be a specific.

There is nothing like unanimity of opinion in regard to any one of these agents, even among the small number of men employing it. In order to determine the precise value of a given remedy, it should be tried in a large number of unselected cases under as exactly similar conditions as is possible and comparison should be made with an equal number of cases under the same conditions, receiving absolutely no treatment.

A specific remedy must possess "a selective curative influence on an individual disease," and in a much larger proportion of cases than have so far been reported by advocates of these "specifics."

The brilliant results of serum therapy, especially in diphtheria, a disease strikingly analogous to croupous pneumonia, lead many to expect a specific in anti-pneumococcus serum but, while reports of its employment are generally favorable the work has not been extensive enough to permit of conclusions.

Having then no specific, our treatment must of necessity be supportive and expectant, or in other words we must treat the patient, not the disease. If we believe the nature of the disease to be that of a toxæmia resulting from the absorption of poisons from a primary focus in the lung and that it sometimes does become (as has been shown) a true septicaemia, then should we not adopt in its treatment the same general principles employed in septic poisoning arising from other sources where the disturbing agent may not be eradicated? The sole object of treatment then should be to render every possible aid to nature in the struggle to overcome the poison.

The most cleanly surroundings, best ventilation, most careful nursing, and the greatest preparedness to meet emergencies are vital considerations and generally more certainly obtainable in a well equipped hospital than in any private home.

The patient should be given a calomel purge followed by a saline. Daily bath, cold or tepid, as proves most agreeable. Cold water to drink in abundance. Liquid diet. Ice cap to the head and one to the chest for pain. In addition morphia hypodermically or a mustard paste may be necessary. Restlessness and pain may sometimes be relieved by Dover's powder, which is also beneficial on account of its diaphoretic action, but should be used cautiously so as not to upset the stomach. A cotton jacket made of non-absorbent cotton or wadding sewed on cheese cloth and covered by oiled muslin or silk should be applied in such a manner as to permit of ready examination of the chest, front and back. If the cough is excessive and painful a little codein or morphine may be adminis-

tered but expectorant mixtures with heavy syrups should be avoided. This plan of treatment for adults in the early stages before cyanosis or other indications of embarrassment of the circulation appear, will generally suffice. In regard to the treatment of acute lobar pneumonia in children rarely more than the above is ever necessary. The *Archives of Pediatrics* (February, 1904) says: "Lobar pneumonia is so seldom fatal in a child and so distinctly self-limited that the most important lesson to learn is non nocere, do no harm."

Many cases progress under such a treatment to a crisis and complete recovery. It seems now generally accepted that the fatal termination of pneumonia in cases uncomplicated by previously existing organic disease, is due to heart failure. The action of toxins on this organ lead to "asthenia and subsequent marked changes in the right heart with degeneration in its muscle, heart clots and vaso-motor paralysis."

By a close observation of the clinical course and a daily determination of the extent of the involvement of each organ the signs of gradual weakening of the heart may be detected and active measures instituted to relieve its embarrassment.

The most reliable agents for this purpose are alcohol, strychnia, digitalis and normal saline solution by hypodermoclysis or by bowel. These stimulants should be begun gradually, early rather than late and withdrawn as the circulation improves. Oxygen should be tried in deepening cyanosis. Venesection is rarely beneficial but when performed should be followed by transfusion of saline.

Realizing the gravity of the disease and the inefficiency of present modes of treatment, we should approach the subject armed with all the knowledge at our command, and with minds untrammelled by tradition or dogma be ever on the alert to adopt any measure sanctioned by good authority and appealing to our best judgment.

At present greatest safety seems to lie in that golden mean somewhere between the extremes of "promiscuous drugging" and "therapeutic nihilism," to be sought out by every reasoning and scientific physician.

SOME OF THE REFERENCES CONSULTED:

Osler, Musser, Butler, Holt, *Twentieth Century Practice*, The Hand Book of Medical Sciences, Nothnagle's Encyclopedia, Hare's Therapeutics, Cushry's Pharmacology, Maryland Medical Journal, May, 1904; Van Zandt, *Therapeutic Gazette*, January, 1904; Scott and Montgomery, *ibid*; McRae, *American Medicine*, 1904, vii 135-138; Journal A. M. A. Files; Medical Record Files; *Archives Pediatrics*, February, 1904.

CLINICAL DIAGNOSIS OF LESIONS OF THE PANCREAS.

The importance of the pancreatic functions in the maintenance of health is now universally recognized, and in consequence, the pathologic conditions affecting the gland are being more thoroughly investigated and their clinical effects more keenly studied and appreciated. The symposium on "The Pancreas and Pancreatic Diseases," at the last Congress of American Physicians and Surgeons, epitomized the general knowledge of the subject, and if little addition was made to its extent the more glaring defects were strikingly emphasized. It was demonstrated that various abnormal conditions affecting the ducts and the parenchyma of the pancreas were usually productive of rather indefinite signs and symptoms, and which were, moreover, frequently difficult of differentiation from those resulting from pathologic processes involving neighboring structures. Certain lesions (e.g., acute pancreatitis, chronic obstruction of the common bile and pancreatic ducts) usually give positive indications for the institution of procedures that will almost certainly lead ultimately to the proper diagnosis and treatment, but there are many conditions that do not give these indications, and in which the proper treatment is of but little if any less consequence, so that any feasible and accurate diagnostic aid in the determination of the presence and nature of pancreatic lesions would be of the greatest value. Particularly is this true since it has been conclusively demonstrated that some operations, although performed for the relief of other conditions, have proven to be so beneficial to certain not uncommon pancreatic lesions.

The recent reports of Mayo Robson and Cammidge record the discovery of an apparently accurate and fairly simple clinical test capable not only of indicating the existence of a pancreatic lesion, but also, in a way, of determining its nature. Mr. Robson's reputation carries conviction that the method is worthy of general adoption. It has been fully described in this Journal.

Cammidge's experiments, as reported, seem to exclude the possibility of error or of faulty interpretation of the results. Both are to be congratulated on so important a contribution to clinical methods, especially Mr. Cammidge for the able deduction of the chemical reaction. Whether this may prove to be as efficient in the hands of other laboratory workers, remains to be demonstrated. There is no apparent reason why it should not, and with the large amount of material to be found in hospitals, there should be a widespread investigation, and, let us hope, confirmation of such valuable and important observations.—Editorial, Jour. Am. Med. Ass'n, April 30, 1904.

Selected Articles.

FEEDING AND THE REST CURE IN TYPHOID FEVER.*

By H. A. HARE, M. D.,

Professor of Therapeutics in the Jefferson Medical College of
Philadelphia.

In casting about for a subject which would be worthy of your attention this evening I confess that I have had some difficulty in deciding upon the theme which would prove most interesting. On the one hand I might bring before you certain questions which can only be decided by experimental research, and on the other it is possible to call your attention to equally timely, but more practical, subjects, which perhaps can be immediately utilized with advantage in practice. In addressing a body of medical men which possesses a wide clinical experience obtained first in the wards of the Presbyterian Hospital, and secondly in private practice, one cannot help feeling that he occupies the position of one who comes to obtain information rather than to give it. This is my attitude to-night, and if in the course of my remarks I touch upon subjects which seem to you hackneyed and already exhausted, you must recognize that they are themes which strike me as being of importance in my own experience in which perhaps you may be interested, and from which, in the discussion which I hope is to follow, I may perhaps gain much from the ideas which will be advanced by those who are first courteous enough to listen to me.

The first subject of which I wish to speak is that which deals with the question of the amount of food which should be given to a patient suffering from typhoid fever at the three stages of his disease. I think that every one is agreed that during the first week of his illness the diet should be liquid, since at this time all portions of the body are apparently less able to carry out their functions in a normal manner

*Read before the Alumni of the Presbyterian Hospital, New York, May, 1904.

than they are in the second and third week of the disease. In cases which have considerable severity at onset it has always seemed to me that the digestive system was more disturbed in the first few days of the illness than later on. I am one of those who are firmly convinced that for many years we have been making a grave mistake in confining patients suffering from typhoid fever to a purely milk diet. This fact was borne in upon me forcibly about seven years ago when suffering from a prolonged attack of typhoid fever, which while it was severe in many respects, particularly in its complications, nevertheless left my brain during most, if not all, of the illness as capable of thought as it is at this moment. While I did not suffer from hunger in the sense of having an appetite, I was continually conscious of the fact that I was underfed, and I also knew that when in health I could not take large quantities of milk with good results. When it came to the ingestion of considerable amounts of what might be called "hospital milk," I felt that I was receiving little more than water, and many hours of thought convinced me that on the one hand I was being attacked by the bacillus of Eberth, and that on the other my powers of vital resistance were being reduced by partial starvation.

Immediately after this I began giving those cases of typhoid fever which came under my care a varied diet of liquid and semi-solids, and since that time I have been greatly impressed at each term of hospital service by the advantages of this method of feeding. We must recollect that the average adult requires at least 2500 calories a day for normal existence, and as each quart of milk represents only about 500 to 600 calories, it is evident that for a patient to receive the total number of calories required for the maintenance of his body he must drink not less than 4 1-2 quarts of milk a day. These facts further impress us with the utter inadequacy of the pure milk diet in this disease. Nor can we help appreciating the fact that we are overloading the organs of absorption and elimination with an excess of fluid, which certainly cannot be advantageous, although of course an excess of liquid in typhoid fever is preferable to a lack of it.

Again, I can see nothing in the clinical history or pathology of this disease which in any way justifies us in disordering metabolism by the institution of a rigid single diet; and I doubt if there is a man in my audience who can go to bed for a period of a month or six weeks and receive an absolute milk diet for that period of time without emerging very much the worse for wear.

It is my custom to give all patients after the first week of typhoid

from one to two soft-boiled eggs a day in addition to the ordinary allowance of milk, and to vary their diet by the use of curds and whey, rice which has been boiled to a pulp, barley, wheat, and oatmeal gruel and a cup of corn-starch with vanilla or some other flavoring substance of a like character. As a result I very rarely see the marked ataxia which is so common a symptom in convalescence from typhoid fever. The patient's nutrition is so well preserved that he is but little more emaciated than many cases of acute pneumonia at the time of recovery. Secondary complications like furuncles and bed-sores are unknown, for by the use of a plentiful supply of food the patient's vital resistance is maintained to such a degree that simultaneous collateral infections do not take place. The average case of convalescent typhoid fever is a fair mark for any infection because it is half-starved.

Recognizing that typhoid fever is characterized by a deficient secretion of digestive juices, all these patients receive hydrochloric acid and pepsin when proteids are administered, and taka-diastase and pancreatin when carbohydrates are used. I have never seen any bad symptoms arise as the result of this plan, and I am quite sure that I have seen an immense amount of good follow. I am not friendly to the use of beef tea, which I believe acts as a first-rate culture medium and frequently increases tympanites and diarrhea, the stools becoming fetid under its use.

For many years I have been much dissatisfied with the various theories which have been advanced to explain all the good effects which follow the use of cold bathing in typhoid fever. Most of my auditors will remember that but a few years ago the good effects of cold plunging were supposed to depend chiefly upon the fact that by this means we were able to bring the temperature approximately to normal. Increasing experience has, I think, taught us that the mere reduction of the temperature is the least of the results which hydrotherapy brings about. We must believe, on the other hand that the readjustment of the circulation or the re-establishment of the normal circulatory equilibrium is the chief benefit derived from this method of treatment, and there can be no doubt, I think, that the great increase in the elimination of toxic materials in the urine after the cold bath depends upon this readjustment of the circulation and the increased rapidity with which toxic blood is taken to the kidneys where it can be purified. A number of years ago there appeared in the Australasian Medical Gazette a paper by one of the staff of the

Brisbane Hospital in which he reported a large series of cases of typhoid fever treatment not by the use of the cold bath but by the employment of the tepid bath—a method instituted at first because the climate was so hot that ice was difficult to obtain, and subsequently adhered to because the results which were obtained fully equaled and indeed surpassed those which were reached by the use of ice-cold water. In these baths, as well as in the cold baths of Brand, we all know that active friction is a factor of very great importance, aiding the dissipation of body heat, and the longer I study this matter the more convinced I am that active friction in these cases is an exceedingly important part of the treatment not only because it aids in the dissipation of heat and readjusts the circulation, but also because it exerts upon the patient beneficial effects which follow the use of massage when we employ the rest cure in the treatment of neurasthenia.

Some months ago, when Dr. Mitchell read his first account of the early cases in which he instituted the rest cure, he took pains to point out that he failed dismally in good results from rest in bed and forced feeding until in addition he provided passive exercise in the form of massage

Personally I have come to consider that the value of the modern method of treating typhoid fever by cold depends in great part upon the fact that when cold bathing is used, the typhoid fever patient, who is undoubtedly suffering from a form of toxemic neurasthenia, receives throughout his illness a form of rest cure which maintains strength and puts him in first-rate physical condition in much the same manner as we endeavor to do for nervous wrecks in the social world. In other words, I do not believe that the free use of cold water in itself is the chief factor for good in these cases, but that if we amply feed and thoroughly rub our patients, a great portion of the good comes from these measures. In other words I would advocate the employment of the Weir Mitchell rest cure in the treatment of typhoid fever.

I have also been very much impressed with two additional facts in this connection. One is that equally good results can be obtained in typhoid fever if patients are properly sponged with friction instead of being plunged. The same fall of temperature, the same reaction, the same reddening of the skin without cyanosis and congestion, can be produced by sponging with friction. I have never seen

a temperature which could not be reduced by proper sponging, or ice-rubbing, even better than by the plunge bath. The sponging possesses the additional advantage that the patient does not have to be moved from his bed, that the great muscles of the back can receive even more attention than the anterior portion of the body, thereby increasing the dissipation of heat very greatly and preventing creasing of the skin and the formation of bed-sores. For several years I have never plunged my patients, and have always sponged them. My experience is, however that every new nurse that sponges for me has to be instructed in the proper use of friction, and in any instance in which the temperature fails to fall under this method I feel confident that the fault is in the way the nurse does the sponging and not in the method itself.

The second point that many patients suffering from typhoid fever are profoundly toxemic when their temperature is considerably below $102\ 1\text{-}2^{\circ}$, the point at which the cold plunge is unusually considered wise. Such patients are not given the cold plunge for the very good reason that if they receive it their temperatures may become sub-normal, and they may collapse. The toxemia is permitted to persist, because the temperature has not risen high enough. Under these circumstances I believe that we should resort to tepid baths. I feel convinced that I have repeatedly saved life by the use of tepid or even hot water used with sponging and friction in toxemic cases which were certainly too feeble to bear cold. By the use of hot or tepid water with friction, circulatory equilibrium can be re-established, toxemia diminished, and even the temperature reduced to normal.

The next point I wish to consider is the question of the administration of alcohol to typhoid fever patients. Before I fed these cases so well I used very much more alcohol than I use at present, and I was firmly convinced of the fact that it did these patients good. I still use it quite largely but, with good feeding, I can get along with much less than formerly, probably because the patient burns up food products in the body instead of burning up alcohol.

Closely connected with this question of the administration of alcohol is that which deals with the manner in which it can do good in typhoid fever. It has been shown so conclusively by a host of scientific investigators that alcohol is not a true stimulant in the sense in which we employ that term in connection with drugs which

increase the functional activity of various organs that we cannot ignore the fact that in the past our views concerning its mode of action were erroneous. On the other hand, the experience of a vast number of practitioners has been almost without exception in favor of the proper employment of this drug in typhoid fever, and surgeons innumerable are prepared to assert that iron, alcohol, and quinine are the best means of combating various forms of bacteremia, admitting, it may be, that they know not how they do good, but asserting vehemently that they are invaluable.

At the present time it would seem likely that we are standing on the threshold of therapeutic discoveries which make all previous ones seem insignificant. Ehrlich's theories in regard to antitoxic bodies, receptors, and haptophores have thrown a flood of light upon many physiological and pathological processes, and I believe are destined to show that many of our therapeutic measures which we have thought rested upon a scientific basis have been purely empirical, in the sense that we have been entirely ignorant of the manner in which their effects have been produced. In other words, as an illustration of this, in the past we have called alcohol a stimulant, thinking only of the circulation, the kidneys, and respiration. It is quite possible that it does not act as a stimulant upon these functions, but upon other functions which are of equal importance in the human body and are connected with immunity and the ability of our bodies to resist infection. It would seem probable that certain drugs, such as those I have named, for example, may exert an influence upon the body by means of which the processes of artificial immunity are greatly increased. Recognizing the unsatisfactory state of our knowledge in regard to the employment of alcohol in various infections, it occurred to me that this drug might perhaps do good in typhoid and other fevers of an asthenic type associated with bacteremia by increasing the bacteriolytic power of the blood, and I therefore instituted a series of experiments which I reported at the meeting of the Association of American Physicians in Washington in May, 1903, and published in the *Therapeutic Gazette* for May, 1903.—*Therapeutic Gazette*.

A CASE OF RUPTURED INTESTINE WITH ARTIFICIAL ANUS, FECAL FISTULA AND OPENING THROUGH THE SCROTUM.*

By E. A. VANDERVEER, M. D.,

ALBANY, N. Y.

Attending Surgeon, Albany Hospital; Instructor in Surgery, Albany Medical College, Albany, N. Y.

The early diagnosis of rupture of the intestine, in order to facilitate a prompt operation, is becoming daily more recognized, so that the report of the following case may prove of more than ordinary interest.

Dr. Gage,** of Worcester, Mass., has presented a record of 885 cases of rupture of the intestine occurring since 1887. The most common cause of the rupture seems to be a kick from a horse or man; this occurred in 37 cases. In 19 it was caused by a fall, and in 6 by a peice of wood thrown from a circular saw. The duodenum was injured in 10 instances, the jejunum in 20, the ileum in 42, and the large intestine in but 6. The large intestine seems less liable to injury on account of its more protected position and stronger and thicker coats.

Up to within a few years, rupture of the intestine has been practically a fatal accident, but with the more improved methods of diagnosis and operation the results have become more favorable. In the 85 cases reported by Dr. Gage, 45 of the patients were not operated upon, and died; 40 were operated upon, with 17 recoveries, 42.5 per cent. Of the 17 successful operations, in 3 the patients were under 20; in 7 between 20 and 30; in 3 between 40 and 50; in 2 between 50 and 60, while in 2 the age was not given.

The history of my patient is as follows:

F. J., aged 29, single, native of United States, laborer by occupation. Family History.—Negative.

Past History.—The patient has always been healthy and well since childhood. He uses neither tobacco nor alcohol.

Present Illness.—December 6, 1901, while working in the car-shops at West Albany, he was struck in the abdomen by the end of a joist, 6 inches in diameter. He was lifting the joist in conjunction with another man, off a wagon about 2 feet high, when he slipped on a piece of ice and fell, the joist falling with him and striking him, as stated,

*Read at the meeting of the Medical Society of the County of Albany, April 13, 1903.

**Annals of Surgery, March, 1902.

over the abdomen. He immediately arose and walked about a little, but was seized with severe pain in the region of the umbilicus; he became cyanotic, but did not vomit. The ambulance was called and he was brought to the Albany Hospital in a condition of shock. The pulse was feeble and rapid; temperature subnormal; surface of body and extremities cold; breathing slow and shallow. He complained of intense pain in the abdomen and back. He was conscious but in a very serious condition. The anterior abdominal wall was rigid and board-like and remarkably tender upon pressure. No vomiting occurred.

Physical Examination.— Patient is a slight, well-nourished and fairly-developed man. Skin and mucous membranes are pale and cold. Chest is practically negative; abdomen as stated before.

At the suggestion of Dr. Macdonald he was given a little chloroform, and his abdomen thoroughly palpated and percussed. Even under the anesthetic it was very tender, and his muscles gave a decided board-like feel upon palpation, especially in the right iliac region.

The diagnosis lay between rupture of the intestine, large or small, or of the right kidney. As the patient was catheterized, and no bloody urine obtained, the chances were in favor of the diagnosis of rupture of the intestine. The patient was immediately placed upon the operating table and prepared for operation. A median incision 10 cm. long was made in the anterior abdominal wall. Upon opening the abdomen the patient, who was not taking the anesthetic very well, struggled slightly and forced some of the small intestine out upon the abdomen. Two small perforations were immediately seen in the ileum near its junction with the cecum. These perforations were at once closed by means of Lembert sutures. Search for further perforations was made, but none found. The intestines and abdominal cavity were cleaned as thoroughly as possible with normal salt solution, and the intestines returned to the peritoneal cavity as quickly as practicable, particularly on account of the feeble condition of the patient. The wound was closed with silkwormgut sutures; a glass drainage-tube was placed in the pelvis and packed with iodoform gauze. Duration of operation was 45 minutes. Upon leaving the table the patient's pulse was 114, and respirations 14. A 2 mg. (1-30 gr.) dose of strychnin and a stimulating enema containing whisky, 30 cc. (1 oz.), normal salt solution 150 cc. (5 oz) alternating every two hours was ordered. The tube was ordered packed every two hours. patient did well for the first 24 hours, when he began to complain of considerable pain in the abdomen, and also began to vomit a light greenish-looking fluid. A high glycerin and salts enema was also given at this time, but with very little result. At the end of the first 48 hours the drainage had so lessened that the glass was removed. The patient, however, was dis-

tending more and more, and it was impossible to secure a movement of the bowels. It was clearly evident that general peritonitis had set in, and upon consultation with Dr. A. Vander Veer, it was decided, at the end now of 60 hours to open the wound, bring up the first coil of intestine found, attach it to the edge of the incision, make an opening into it, and see if the distention could be relieved. This was accordingly done; the temperature at this time was 101° , and the pulse 132, and of very poor quality. For the first 24 hours thereafter there was hardly any result, the distension remaining the same and the vomiting growing more fecal in character. There was, however, some improvement in the pulse, the rate being 104, and of better quality. For the next three days small amounts of feces and flatus were expelled from the artificial anus, but the patient grew more delirious. On December 13, one week after the accident, large amount of fecal matter began to be expelled through the artificial opening, and the patient's mental condition slowly cleared up. He also now, and for the first time, took and retained some liquid nourishment.

All went well, the patient slowly improving until December 23, 1901, when a large swelling appeared in the scrotum, on the right side, resembling a hernia. This was treated by means of the ice-cap until December 27, when its true character became apparent, and a pint of pus and fecal matter evacuated. Under proper treatment the tissues healed kindly.

The artificial anus was closed January 7, 1902, just a month after the original injury, by means of a flap-splitting operation. For a time this operation did not seem to be a success, the feces still coming through the wound, but the movements from the rectum gradually increased, and by February 1, 1902, the fecal fistula had entirely healed. The bowels, which became very constipated, were treated by internal doses of olive oil and the use of glycerin suppositories.

The patient was discharged from the hospital February 18, 1902, 74 days after the accident, entirely well. He has remained so ever since, but has not been able to do any heavy work, owing to the feeling of weakness of the abdominal wall, although no ventral hernia presents.

In connection with this case I would call attention to the making of an artificial anus. In my opinion, this procedure saved the patient's life, as he undoubtedly had a general peritonitis; as it was impossible to move the bowels per rectum, the artificial anus allowed the gas and feces to escape, thus relieving the distention and the pressure against the diaphragm.

In looking over the literature of this subject I have been unable to find a case of this description in which a fistula opened through the

scrotum. Either one of two things happened: First there was a third rupture of the small intestine which escaped notice at the time of the operation—a possibility which might easily have happened, as the precarious condition of the patient precluded any extensive search of the intestines after the first two ruptures had been discovered. This rupture lying low down in the pelvis on the right side, might have formed a fecal abscess, which gradually worked its way down through the inguinal canal into the scrotum, and so was evacuated; or else, second, the artificial anus did not hold quite tight, and a small amount of feces escaping from the intestines, formed a sinus, breaking through into the scrotum, resulting in the abscess mentioned.

At the present day, when aseptic technic has been brought to such a high state of perfection, the opening of the abdomen is a comparatively simple affair. How much better it is when we get a patient with the history of having been struck in the abdomen by some blunt instrument with considerable force, to make an immediate exploratory incision and see at first hand what really has happened. If nothing serious has occurred, the patient is only put to the inconvenience of being laid up for a couple of weeks, while, on the other hand, if a rupture of intestines or hemorrhage of the mesentery has taken place, no time has been lost and the patient has been given a much better chance of recovery.

It is in this class of cases that the minutes count. Authorities seem to agree that if in rupture of the intestine operation is delayed over 24 hours, the case is practically hopeless. This waiting for the patient to rally from the shock of the accident is all right, but in a good many cases, by the use of saline infusions, stimulation, etc., the patients can be operated upon and saved, whereas if we waited until they rallied, they would either never have done so or else would have died from the effects of the operation.

Recently some writers have called attention to the fact that when reapture of the intestine has taken place, peristaltic movement is at once arrested and does not begin again; whereas, on the other hand, when the abdomen only is contused, the peristaltic movement of the bowel is either not arrested at all or else only for a short time, beginning again in a few hours. In the case reported, this symptom was not looked for, although it is fair to assume that it was absent. My recollection of the case is that when the abdomen was opened peristaltic movement of the intestine had entirely ceased.— *American Medicine.*

Editorial.



JNO. C. LeGRANDE, M. D.,.....Editor and Prop

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The American Association of Obstetricians and Gynecologists.

The Association met in St. Louis, September 13-16, 1904.

This meeting was well attended by distinguished obstetricians and surgeons from different parts of the country.

The provisions made for the comfort of the members of the Association were ample in every respect.

The scope of work was not quite in line with what the writer expected. There was not as much time given to practical obstetrics as one would naturally expect from a society of this character. How-

ever, a number of papers were presented on different subjects, which those interested in the practice of obstetrics would consider very valuable. The time given and the discussion entered into was more on operative obstetrics and gynecology and abdominal surgery.

No one could attend this association without a feeling that he was in the presence of the strongest and best men of the country.

It is regretted by the writer that there was such a small attendance from the South. Dr. Haggard of Nashville, Dr. Broome of New Orleans, Dr. J. D. S. Davis and the writer from Birmingham made up the attendance from the South. Dr. Haggard and Dr. Davis both read interesting papers which were favorably received and liberally discussed.

The American Association of Obstetricians is one of the strongest and most important associations of the country, and we predict for it a great field of usefulness in the future.

Dr. Dorsett of St. Louis, a very efficient and courteous President, proved himself to be an unusually good presiding officer.

Dr. Potter of Buffalo, N. Y., one of the most genial and social of the members, is a great power in the Association. He is the Secretary and the very life of the Association, and to him more than to any other one man is due the credit for the great work which the American Association of Obstetricians is accomplishing today.

The social features of the Association added much to the pleasure of the occasion. The St. Louis Obstetrical and Gynecological Society tendered a reception to the Association at the Fair Grounds, Missouri Building, on Wednesday evening, which was greatly enjoyed by all present. The annual banquet of the Association at the Monticello Hotel on Thursday evening was a very enjoyable occasion.

The following officers were elected for the ensuing year: President, Dr. H. W. Longyear; Vice-presidents, Dr. D. Tod Gillin, Columbus, O., and Dr. John Young Brown, of St. Louis; Secretary, Dr. William Warren Potter, of Buffalo, N. Y.; Treasurer, Xavier O. Worder, Pittsburg, Pa.; new members of the Executive Council elected: Dr. James F. W. Ross, Toronto, Canada, and Dr. Walter B. Dorsett of St. Louis.

The next meeting will be held in the city of New York September, 1905.

The Land of the Free.

Saturday Evening Post says: It is a splendid recognition that has come to Dr. William Osler in his appointment as Regius Professor of Medicine at Oxford University, but it robs us of America's leading physician. There is a feeling that he might have declined, as he declined, other great honors, had it not been for a practice we Americans have of riding success too hard. It is strange to think of this great physician as a victim of the American "courtesy" habit, but that seems to be about the size of it. Doctor Osler is "the doctor's doctor," and we read the following in an account of his recent appointment: "Not only local physicians, but many others from all parts of this country and Canada, consult him concerning their personal complaints. This part of his practice is unremunerative, as the usual courtesies extended by one member of the medical profession to another do not permit of the charging of a fee. Though the confidence of the fellow-members of the medical profession has been flattering to his abilities as a practitioner of medicine, it has, nevertheless, consumed a considerable portion of his time. Some of Doctor Osler's friends believe it has been an important factor in influencing him to make the change."

Doctor Osler's case is not exceptional. Every great specialist in America suffers, in a greater or less degree, from the same conditions. Professional courtesy drains him of both time and strength, and the larger his success the heavier the demands for free service.

America has been called the land of the free pass. Nowhere in the world does the free habit reach such excesses as in the United States. A close observer on a train, especially a handsome train, notices the large proportion of passes to purchased tickets. One of the costliest express trains in the East is called The Pass Unlimited.

Nor does it stop there. At this very time we are having a refreshing illustration of it in the operations of our Government. Millions of documents, weighing in the aggregate hundreds of tons, are being sent through the mails under Congressional franks when, as a matter of common honesty, the campaign committees should be paying postage on them. One reason why our postal system does not turn into the treasury a large profit is the enormous amount of free business it carries.

Of course, there must come a time when reform will begin its work. The railroads are trying to cut down free passes. Business is aiming at courtesy reductions. But the progress is slow.

In some respects there may be a quid pro quo in the free habit, but when it can banish the country's foremost doctor and produce a deficit in a great monopoly like the postal service its weakness is evident.

In the end common-sense will prevail. Then, when all pay alike, those who have to pay will not have to pay so much, for under the free system the man who pays his own way has to pay the way of those who do not pay. .

AN ACTIVE DEPLETANT FOR PELVIC CONGESTIONS.

The presence of congestion, or inflammation, whether acute or chronic, involving the female pelvic cavity forms grounds for anxiety. Fortunately we have passed the age where operative conclusions are hastily made. A superficial study of the vascular supply of the female pelvic organs with its vesico-vaginal and vesico-uterine plexus forming a complete network of anastomosis, is sufficient to show that local applications of depleting agents to the vaginal and rectal canals form both practical and theoretical ideals in treatment which by purgative solution reduces the stasis of engorged cellular tissue and lowers vascular tension, thus aiding nature in restoring normal glandular action. Glyco-Thymoline in contact with mucous membranes everywhere produces the following physiological activities in direct proportion to the vascularity of the structures. It stimulates the secreting cavity of glandular structures of all mucous surfaces, so that larger quantities of watery fluids are exuded. On the law of exosmosis, which determines the passage of fluids through animal membranes from a rare to a more dense saline medium, this solution through its stimulating and hygroscopic property brings about a rapid depletion, draws outwardly through the tissues the products of inflammation and materially reduces the danger of septic infection. The following clinical cases bear with interest on the subject. Chas. Le Cates, M. D., Philadelphia, Pa., reports: Mrs. A. consulted me in reference to her condition, made a thorough examination and found uterus much enlarged, very turgid, degeneration of the endometrium, discharge rather profuse. Treatment: Hot vaginal douche 10 per cent. Glyco-Thymoline. I then irrigated the uterus with pure Glyco-Thymoline and tamponed the vagina with lamb's wool saturated with Glyco-Thymoline. This treatment was given twice and three times a week, improvement was rapid, congestion was reduced and patient discharged in six weeks. I see the patient frequently and there has been no recurrence of former trouble.

Miscellaneous Notes.

INFLAMMATION OF THE BLADDER.

J. W. Hawkins, M. D., Westville, Fla., says, "Satyria is the finest remedy I have even tried. I have a patient that was very low with inflammation of the bladder and Satyria cured him. I shall always use Satyria when I have any cause to do so. Wishing you all the success you deserve."

Dr. J. L. Waffenschmidt of Cincinnati, Ohio, who graduated from Miami Medical College in 1872, writing, says: "My experience with Sanmetto has been pre-eminently satisfactory in all cases of irritable conditions of the urinary organs, and I prescribe it with a feeling of certainty of good results in catarrhal conditions of the pelvic organs and atonic conditions of the sexual glands. In cystitis, spermatorrhea, enuresis and loss of sexual power it is par excellence."

Daniel's Conct. Tinct. Passiflora Incarnata is a sedative, calmative and nerve rejuvenant. In all forms of nervousness, including St. Vitus' Dance, nervous headache, nervousness accompanying childbirth, etc., it acts promptly in restoring the nerves to their normal state and in giving natural sleep to the patient. Passiflora is most valuable in the treatment of typhoid fever, because when given in teaspoonful doses it removes the nerve tension and increases vitality. In every nervous disorder, Passiflora has proven its adequacy as hypnotic and antispasmodic.

ENTEROCOLITIS AND CHOLERA INFANTUM.

Cleanse the intestinal tract with calomel and a saline or with castor oil. Prescribe a suitable diet, easily digested and non-irritating. Irrigate the rectum and colon at suitable intervals with normal salt solution or some mild antiseptic, using for the purpose a soft rubber catheter or colon tube.

Instead of opiates, which lock up the secretions and thereby favor auto-intoxication, relieve the muscular rigidity and the excruciating pain which is such a drain upon the vital forces, by the use of Antiphlogistine as hot as can be borne to the entire abdominal walls and covered with absorbent cotton and a compress. If the patient is not

too far gone, the effect will be astonishing. The little sufferer, who until now has been tossing in agony and restlessness, with drawn features, will in most cases quickly become quiet; the drawn look will leave the face and a restful slumber will often supervene and start him upon the road to recovery.

The explanation of this, in part, is not far to seek. The heat and moisture combined with Antiphlogistine's well known hygroscopic properties, directly soothe the inflamed parts, reflexly contracting the visceral blood-vessels and relieving their engorgement. The tension of the muscular and nervous systems is further relieved by the action of Antiphlogistine through the solar plexus thus adding to and emphasizing its local effects upon the inflamed intestines.

SOUND LOGIC.

Whether a vegetarian diet can give to men the physical and mental energy which are marked characteristics of our people when compared with those of many other countries may be a subject upon which opinions fairly differ, but there cannot be a doubt that most Americans eat more meat than is necessary, particularly in the summer months of the year. In most families the butchers' bills are quite as large in the months of July and August as in the months of December and January, assuming that at neither time is there any interruption in ordinary housekeeping methods. Now, it is generally admitted that it is undesirable, because unhealthy, to eat more meat in the tropical regions of the world with the same freedom that meat would be eaten by those living in the temperature or arctic zone. But in the summer months we have the conditions of the torrid zone brought to our doors, and a proper regard for health would require that we should make our practices conform to these climatic conditions.—Boston Herald.

POISONS IN MILK.

The fact that 250 dealers in milk in this State have been detected recently using formaldehyde to preserve the fluid is discouraging. Various other poisons were found in use by other dealers. And only a comparatively few dealers undergo this inspection. The punishment inflicted for such crimes is trivial. Hundreds of infants are killed by the fraudulent use of such poisons by dealers, and many adults are injured, perhaps permanently. Until more drastic measures to protect the public health are enforced the greedy and conscienceless "dealers" may be expected to continue this work, as it is profitable even when they have to pay fines occasionally.—Philadelphia Press,

WHEN YOUR CASE IS WEAK ABUSE THE OTHER SIDE.

This maxim has been a favorite standby with the legal profession from time immemorial and unfortunately certain pharmaceutical manufacturers have recently seen fit to make use of that maxim. This is particularly true of the manufacturers of a certain iron preparation.

The impudence and effrontery with which these people try to hoodwink the medical profession is rather remarkable.

No other preparation ever came before the medical practitioner with so little detail as to methods of preparation, composition, therapeutic effect, etc., etc., and nevertheless the profession is asked to accept the wildest and most extravagant statements as to its wonder-working capabilities. This is not all. The makers of this preparation, in seeking the support of the profession covertly attack and sling mud at all other iron preparations that have been before the profession for years. They single out Pepto-Mangan, a combination which has stood the tests of the leaders in the scientific medical world both here and abroad, an organic iron combination in which, in its results, the general practitioner and the hospital clinician have learned from experience to place implicit confidence.

This unbusinesslike method of attempting to cast discredit upon other reliable and thoroughly tested combinations we cannot term otherwise than despicable, and furthermore we know our readers cannot be influenced by unsupported statements of financially interested parties, but will bear in mind that Gude's Pepto-Mangan was submitted to the profession as an organic iron product, and the results obtained by its use, as also the scrutiny of analysis by chemists of repute, substantiate all that has ever been claimed for it.

Attempting to foist upon the attention of the physician a product simply by insinuation that known articles are inferior, is a manner of doing business which should receive the stamp of disapproval by every one of our profession.—Toledo Med. and Surg. Reporter, April, 1904.

The American Medical Society for the Study of Alcohol and Other Narcotics was organized June 8, 1904, by the union of the American Association for the Study of Inebriety and the Medical Temperance Association. Both of these Societies are composed of physicians interested in the study and treatment of inebriety and the physiological nature and action of alcohol and narcotics in health and disease. The first Society was organized in 1870 and has published five volumes of

transactions and twenty-seven yearly volumes of the Quarterly Journal of Inebriety, the organ of its Association. The second Society began in 1891 and has issued three volumes of transactions and for seven years published a Quarterly Bulletin containing the papers read at its meetings. The special object of the union of the two Societies is to create greater interest among physicians to study one of the greatest evils of modern times. Its plan of work is to encourage and promote more exact scientific studies of the nature and effects of alcohol in health and disease, particularly of its etiological and therapeutic relations. Second, to secure more accurate investigations of the disease associated or following from the use of alcohol and narcotics. Third, to correct the present empirical treatment of these diseases by secret drugs and so called specifics and to secure legislation, prohibiting the sale of nostrums claiming to be absolute cures containing dangerous poisons. Fourth, to encourage special legislation for the care, control and medical treatment of spirit and drug takers. The alcoholic problem and the diseases which center and spring from it are becoming more prominent and its medical and hygienic importance have assumed such proportions that physicians everywhere are called on for advice and council. Public sentiment is turning to medical men for authoritative facts and conclusions to enable them to realize the causes, means of prevention and cure of this evil. This new Society comes to meet this want by enlisting medical men as members and stimulating new studies and researches from a broader and more scientific point of view. As a medical and hygienic topic the alcoholic problem has an intense personal interest, not only to every physician, but to the public generally in every town and city in the country. This interest demands concentrated efforts through the medium of a society to clear away the present confusion, educate public sentiment, and make medical men the final authority in the consideration of the remedial measures for cure and prevention. For this purpose a most urgent appeal is made to all physicians to assist in making this Society the medium and authority for the scientific study of the subject. The secretary, Dr. T. D. Crothers, of Hartford, Conn., will be pleased to give any further information.

OFFICE PHONE, BELL 305**RESIDENCE PHONE, BELL 1790****DR. SIBLEY,****EYE, EAR, NOSE AND THROAT,****515-516 FIRST NATIONAL BANK,****BIRMINGHAM, ALABAMA**

Abstracts.

TO LIMIT SALE OF OPIATES.

Druggists in Atlantic City have formed a combination for the object of limiting the sale of cocaine, opium, and laudanum to colored persons. The druggists have learned that the evil is growing, and at their own sacrifice of profits they will use their influence to lessen the evil, which, the chief of police says, is responsible for many crimes.

Chief Eldridge thinks the State should pass a law that would put difficulties in the way of procuring the narcotics. He says:

"I have traced many thefts and other crimes to the condition of mind in which the druggs leave their victim. This is particularly true of the colored element. The druggists may help the police department if they will use discretion in the disposal of the opiates."

THE OPIUM EVIL IN THE ORIENT.

The opium committee appointed last August by Hon. Wm. H. Taft to investigate the laws and conditions with regard to opium in all Oriental countries has made its report. The committee recommends that the opium traffic be made a governmental monopoly at once; that at the end of three years the importation of opium be absolutely prohibited, with the exception of that for medical requirements; that only confirmed habitues of the drug who are over 21 years old be granted a smoker's license; that an educational campaign against the use of opium be started in the schools; that the habitues of the drug be treated free of charge in government hospitals, and that Chinese found guilty of importing opium be deported.

TO ACQUAINT LAYMEN.

How to acquaint laymen with the aims and possibilities of the medical profession is a great problem. The dense ignorance as to what we are actually doing, and how much more we could do had we the sanction and efforts of the public in general, is something remarkable. The union of the State and Medicine ought to be accomplished, so that the legislatures of the various States would consider their hospitals and medical schools as their wards. In Pennsylvania this obtains to a greater extent than in New York, yet New York hospital property

and medical institutions are exempted from taxation, which is of itself a great gift, so that we cannot complain but that medical science is to some extent appreciated by the laity. It has been suggested at various times that public lectures be given in which medical subjects that would interest laymen be discussed in a broad way. This would be rather difficult to arrange, because if the lectures were not interesting the attendance would not warrant the effort made, and to get men to drop for a time their technical way of speaking and their therapeutical contentions would be a difficult task. The stamping out of malaria and yellow fever by the destruction of the mosquito, the great results from sanitary work in the cities, are accomplishing a great deal, and we believe the dawning of a better day, when there is a frank and cordial co-operation between laymen and physicians, may even now be seen.—The Post-graduate.

A BENEFACTOR OF MANKIND.

Since the discovery of vaccination by Dr. William Jenner rescued mankind from the scourge of smallpox—a discovery which, in its far-reaching effects, saved millions upon millions of human beings from suffering and disfigurement or from death from a loathsome disease—probably the demonstration by the late Dr. Walter Reed that yellow fever could be completely controlled must be considered as the greatest boon that medical science has given the world.

Aside from the saving of lives, it is difficult to estimate the financial value of this discovery to the business interests of the United States. The records show that under former conditions no community, North or South, was exempt from the dangers of this destroyer of life and commerce. In one epidemic one-tenth of the population of Philadelphia perished, while in New Orleans, then comparatively a small town, no less than 8000 human beings perished from this fever. Again, in 1870, when the Mississippi Valley was so sorely stricken, the loss due to the interruption of traffic was more than \$15,000,000.

So thorough had been the work of Dr. Reed that, although he died within three years of his great discovery, he lived to see the city of Havana, which for a hundred years had been the hotbed and distributing center of this scourge, exempt from yellow fever. And even now, within this short period of time, so absolute is the confidence in the methods he established that persons taken ill after sailing from infected ports are removed from vessels in the harbor of Havana and carried into the city to be isolated and treated.

At a meeting of the American Medical Association at Atlantic City the sum of \$8000 was subscribed by the physicians there present, and an additional sum of \$17,000 is required. It is believed that when others than physicians have their attention called to the inestimable value of this man's achievements they will generously contribute.—Exchange.

ABSTRACTS

HAY FEVER.

For years the malady known as hay fever has been the theme of many an able discussion. Its etiology, pathology, prophylaxis and treatment often have been the subject of study and experiment by physicians, and also by intelligent laymen. The disease has been described as a catarrhal affection of the conjunctivae and the mucous membrane of the respiratory tract, characterized by an annual recurrence at about the same date in a given case. Another view is that the disease is neurosis, and that the local symptoms (rhinorrhea, sensory disturbances, etc.,) are due to vasomotor paralysis.

The most conspicuous symptoms of hay fever are a burning and itching sensation in the nasal region and between the eyes; violent paroxysms of sneezing; a copious discharge of serum and liquid mucous from the nasal passages; profuse lacrimation; now and then, febrile manifestations; frontal headache; and in not a few cases, some asthma.

The diagnosis having been established the subject of prevention and treatment is of the utmost importance. It would be utterly useless and wearisome to attempt to review the list of remedies and the methods of treatment that have been proposed for this disorder. The interests of physicians and patients will best be served by a recital of facts respecting the most successful mode of treatment known at this time.

A glance at the list of symptoms and a brief consideration of the pathology of hay fever lead to the immediate conclusion that the chief indications are to check the discharge, allay the irritation that gives rise to the paroxysms of sneezing, reduce the turgescence of the nasal mucosa and relieve the stenosis. The only single remedy that meets these indications is Adrenalin as represented in Solution Adrenalin chloride and Adrenalin Inhalant. By stimulating the vasomotor supply it contracts the arterioles, and thus promptly and efficiently relieves all the annoying symptoms referable to vasomotor paralysis. By its powerful astringent action upon the mucous membrane, which it blanches completely in a few moments, it controls symptoms referable to a catarrhal inflammation of that structure. Indeed the results that have been accomplished with Adrenalin in this field alone are really remarkable and of the utmost importance. Parke, Davis and Co., who market Solution Adrenalin Chloride and Adrenalin Inhalant, have prepared a very complete treatise on the topic, which contains more information than is to be found in the average text-book. They will cheerfully mail a copy of the booklet to any physician applying for it.

THE TRAINING OF THE SURGEON.

Of a host of things in which medical men may take a wholesome pride, not the least is the progress made in medical education. Time was, and not long ago, when an apprenticeship of variable duration and quality conferred the right to practice. After that came the proprietary schools, with a six months' course of study. Then the course of study was lengthened to two years, three, four, even five. Then came combination with universities, the employment of salaried teachers—medical colleges proper. All these changes have taken place with almost mutoscopic rapidity, yet the hope and effort for better things in medical education is not yet satisfied. How it may be improved has become a favorite theme at medical gatherings.

Thus in delivering the annual address in medicine at Yale University, Dr. W. S. Halstead, of Baltimore, chose "The Training of the Surgeon" as his subject, and his oration, which is published in *American Medicine*, bears the marks of thoughtful sincerity. To read it is altogether worth while.

In his opinion the American system of educating surgeons is faulty from beginning to end even the training of the best. "On graduating," he says, "they become hospital internes, but their term in the hospital is only one and a half, occasionally two years, only a little longer than the term of hospital service required in Germany of every applicant for the medical degree, and not so long, on the average, as that required of each medical graduate of the University of Tokio. The interne suffers not only from inexperience, but also from over experience. He has in his short term of service responsibilities which are too great for him; he becomes accustomed to act without preparation, and he acquires a confidence in himself and a self complacency which may be useful in time of emergency, but which tend to blind him to his inadequacy and to warp his career."

The German system he regards as preferable to this. There the house surgeon, or first assistant, is selected from a number of assistants after several years' service. No regular order of promotion is followed—merit counts. After eight to twelve years' hospital work the assistant in a large university clinic is open to an invitation to fill the chair of surgery in some school. The list of professors in the German universities is a roll of honor, and each successor is inspired with zeal to equal or surpass those who preceded him. Usually he becomes a man of influence and power. To construct a similar system in this country would require a hospital with an abundance of clinical material, directly under the control of the medical college. The remuneration of the professors is a serious question. In America

few men of eminence would entirely give up private work for the salary which any university could offer. Eventually, when the endowments of the medical schools are increased, it will become possible to obtain the undivided service of the best teachers of medicine and surgery. For the present, Dr. Halstead proposes that the surgeon be permitted to accept remuneration for certain patients operated upon in the university hospital, and under very exceptional circumstances be allowed to visit a patient in his own town or State, or in another State.

Dr. Halsted closes with a warm and well-deserved tribute to the courage, ingenuity, dexterity and resourcefulness of American surgeons. Considering this it is certain that they will soon evolve methods by which their art can be taught and learned as well at home as abroad.—Medical Review.

NEWSPAPER MEDICINE.

The daily papers now recognize a growing popular interest in medical matters, and well-written articles command a ready sale. The preparation and sale of popular articles to the lay press naturally does not appeal to physicians who are fully engaged in professional work and the supply is drawn from very poor sources. There is no doubt that the newspapers would greatly prefer the work of good men, and it is an absolute waste of professional opportunity to allow the publishers so little discrimination in the choice of material. It is in the power of many first-rate physicians, and beneath the dignity of none, to give the general public most interesting information, which is at the same time wholesome.

The Sunday papers recently published an example of very bad scientific literature in an article copyrighted by one Viskniskki, and written by a Dr. Marion T. Haslet, whose name does not appear in Polk's Directory. His title is "What to Do in Danger," and the particular dangers which he considers in three columns are the bites of dogs and snakes. This blind guide advises one who is bitten by a dog to suck the wound and to dismiss the last shades of suspicion that the dog may have been rabid. After a dog bite one may die of fright, but not of rabies. True rabies, he says, is extremely rare, while simulated rabies is not uncommon. Of course, he quotes Rosse and Dulles, and misquotes more authoritative men. The sources of misinformation in the subject were somehow accessible to this writer. If one fails to suck out the fear of rabies, one may take a vaporbath. The dog takes his chances, and the writer knows of no case of rabies in a dog, though he accounts for more than a quarter of a million dogs who were not rabid.

It is well enough to diminish the popular fear of dog bites, but to discredit the existence of rabies would be the reverse of a public service if such a dangerous disbelief could be lodged in the public mind. Rabies in man is so rare in America that but 128 persons died of it in the United States in 1900. It is so uncommon that probably no more than 128 persons were attacked by the disease. The distribution of the deaths was, however, such that there is probably no doubt whatever of the existence of rabies in the localities where these deaths occurred. In Alabama 12 deaths from rabies occurred, all in one neighborhood; in Texas 12, in Illinois 14; here, too, fatalities were bunched in a way that suggests local outbreaks of something more substantial than fear. Outbreaks of rabies are rather convincing indeed at close range. Baltimoreans believed in rabies some years ago when a dog in one day frightened ten or a dozen children so badly that eight of them died in the course of the following six weeks.

Dr. Haslett's advice about snake bites is more detailed. If bitten, you are to suck "for all you are worth." You take whiskey enough to quell the "blues," but not enough to be exhilarated, and thus, neatly poised between a funk and a jag, you should go to a doctor. If you go in for frills, you may allow the doctor to inject the ever-ready antivenene. In case you cannot find a doctor, you should maintain your alcoholic disequilibrium for a week or longer.—Maryland Medical Journal.

THE EDUCATION OF THE INTERNE.

It is generally conceded by the medical world that the education of the young physician is not complete when he leaves the medical school. Just what proportion of students in the United States take a year or more of hospital work after graduation is impossible to say. The Mosely Commission stated that 50 per cent. of all students took such a course. In our opinion, this percentage is too high, but whatever the actual number, it is certain that most of us consider such hospital experience indispensable, and that ambitious students strive for it. The reason that the number of graduate students entering the hospitals is not larger is lack of opportunity—not lack of applicants. From one to two years of what might be called practical apprenticeship is the privilege sought by the earnest student. To gain this privilege he often undergoes special training for a competitive examination. He delays for the period of his internship his start in the world and his establishment in his profession.

The courses in the medical schools are subject to constant revision and improvement, and we are gradually rejecting the old method of didactic lectures to crowds of students, and are substituting careful personal instruction to small groups. Indeed, the last decade has seen an almost revolutionary change in the methods of the school. The internship is the copingstone of the structure, and it is worth while to ask whether the methods of the hospital have kept pace with those of the school.—The Journal.